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Schottky Barrier Rectifier

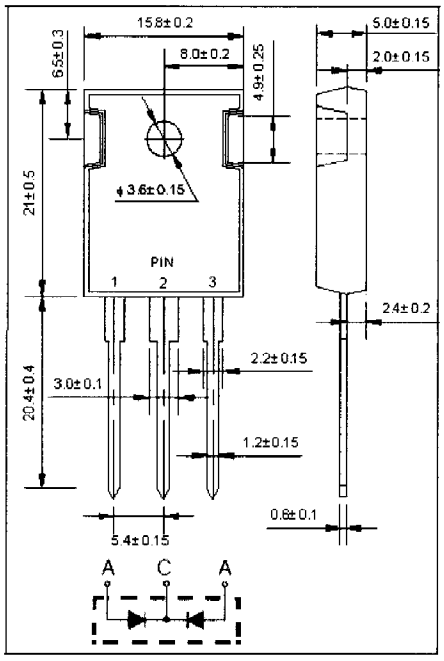
MBR30100PT

FEATURES

- Dual Rectifier Conduction
- Low Power Loss
- High Efficiency
- High Current Capability
- Guarding for Overvoltage protection

APPLICATIONS

- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.



ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	100	V
$I_{F(AV)}$	Average Rectified Forward Current T_C= 100℃	30	A
I_{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	200	A
T_J	Junction Temperature	-55~150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	4.4	℃/W

ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width≤300μs,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 15A ; T_C= 25℃ I_F= 15A ; T_C= 125℃ I_F= 30A ; T_C= 25℃ Note I_F= 30A ; T_C= 125℃	0.85 0.65 0.95 0.75	V
I_R	Maximum Instantaneous Reverse Current	Rated DC blocking Voltage,T_C= 25℃ Rated DC blocking Voltage, T_C= 125℃	0.2 40	mA

Note: Pulse test: 300μs pulse width, 1% duty cycle